

In the Specification

Please amend the specification, as follows:

Page 1, lines 6 through 14:

The present invention relates to a developer supply container which is removably mounted in an image forming apparatus, for example, a copying machine, a printer (for example, laser beam printer, LED printer, etc.), a facsimile machine, a wordprocessor, etc., which forms images with the use of one of the electrophotographic or electrostatic recording methods, in order to supply the image forming apparatus with developer.

Page 1, lines 17 through 27:

An image forming apparatus apparatus, such as a copying machine machine, forms an electrostatic latent image of an intended image by selectively exposing numerous points on the peripheral surface of a photosensitive drum according to image formation data. Then, the electrostatic latent image is developed with developer into the intended image. Thereafter, the developed image is transferred onto a recording medium.

Thus, an image forming apparatus apparatus, such as a copying machine machine, has to be supplied with developer each time it runs out of developer.

Page 2, lines 14 through 17:

The trickling type developer supply container is structured so that it discharges developer by receiving a rotational driving force from the motor with which an image forming apparatus is provided.

Page 2, line 27, through page 3, line 12:

However, a developer supply container, such as the above-described above-described one, in accordance with the prior art is structured so that the mechanism for conveying developer receives the force for driving the mechanism, from the main assembly side of an image forming apparatus. In other words, an image forming apparatus must be provided with the drive train for transmitting the driving force to the mechanism for conveying developer.

Providing an image forming apparatus with a driving mechanism, such as a drive train complicates the image forming apparatus in structure, possibly increasing the image forming apparatus cost and energy consumption.

Page 5, line 10, through page 7, line 14:

Figure 1 is a schematic drawing of the electrophotographic copying machine in the according to a first embodiment of the present invention, showing the general structure thereof.

Figure 2(A) is a perspective view of the developer supply container in according to the first embodiment of the present invention, with the shutter 5 remaining attached thereto, and Figure 2(B) is a perspective view of the same developer supply container as the one shown in Figure 2(A), after the removal of the shutter 5.

Figure 3 is a sectional view of the developer supply container in according to the first embodiment of the present invention.

Figure 4 is a perspective view of the shutter 15 and developer conveying portion 12 of the developer supply container in according to the first embodiment of the present invention, prior to the opening of the shutter 15.

Figures 5(A) and 5(B) are perspective views, different in view angle, of the developer supply container in the main assembly of an image forming apparatus, prior to the opening of the shutter 15, in according to the first embodiment of the present invention, and Figure 5(C) is a sectional view of the developer supply container in the main assembly of an image forming apparatus, prior to the opening of the shutter 15, in the first embodiment of the present invention.

Figure 6 is a perspective view of the shutter 15 and developer conveying portion 12 in according to the first embodiment of the present invention, after the opening of the shutter 15.

Figure 7(A) is a perspective view of the developer supply container in the main assembly of an image forming apparatus, after the opening of the shutter 15, in according to the first embodiment of the present invention, and Figure 7(B) is a sectional view of the developer supply container in the main assembly of an image forming apparatus, after the opening of the shutter 15, in the first embodiment of the present invention.

Figure 8 is a sectional view of the developer supply container 10 in the second according to a second embodiment of the present invention.

Figure 9 is also a sectional view of the developer supply container 10 in the second according to a third embodiment of the present invention.

Figure 10 is a sectional view of the developer supply container 10 in the third according to a fourth embodiment of the present invention.

Figure 11 is a sectional view of the developer supply container 10 in the fourth according to a fifth embodiment of the present invention.

Figure 12 is a sectional view of the developer supply container 10 in the fifth according to a sixth embodiment of the present invention.

Figure 13 is a sectional view of the developer supply container 10 ~~in the sixth according~~  
~~to a seventh embodiment of the present invention.~~

Page 8, line 4, through page 9, line 8:

Referring to Figure 1, designated by a referential symbol 100 is an electrophotographic copying machine (which hereinafter may be referred to as apparatus main assembly).

Designated by a ~~referential symbol~~ reference numeral 101 is an original, which is placed on an original placement glass platen 102 so that the optical image (image formation data) of the original is formed on the peripheral surface of a drum 104 by a plurality of mirrors M and a lens L of an optical portion 103.

Designated by each of ~~referential symbols~~ reference numerals 105 - 108 is a cassette in which a plurality of recording papers P are stored. Among these cassettes 105 - 108, a cassette which contains the recording papers P optimal based on the information inputted by a user through a control panel (unshown) or the size of the original 101, is selected.

Then, the recording papers P in the selected cassette are fed one by one into the main assembly of the copying machine by the corresponding apparatus for feeding the recording papers P into the main assembly while separating them, that is, one of the apparatuses 105A - 108A. Then, each recording paper P is conveyed to a pair of registration rollers 110 through the recording paper conveyance passage 109, and is further conveyed in synchronism with the rotation of the drum 104 and timing with which the peripheral surface of the drum 104 is scanned by the optical portion 103. Incidentally, designated by ~~referential symbols~~ reference numerals 111 and 112 are a charging device for image transfer, and a charging device for recording paper separation, respectively.

Page 9, line 20, through page 10, line 3:

When the copying machine is in the two-sided copying mode, the flapper 118 of the aforementioned afore-mentioned portion 115 for simply discharging, or reversing, the recording paper P is controlled so that the recording paper P is conveyed again to the pair of registration rollers 110 through recording paper re-feeding passages 119 and 120. Then, the recording paper P is conveyed again through the path through which the recording paper P was previously conveyed to form an image on the recording paper P. Then, the recording paper P is discharged into the copy delivery tray 117.

Page 11, lines 15 through 22:

The developer supply container 10 shown in Figure 2 is of the so-called trickling type, or installation type, which is semi-permanently mounted in the apparatus main assembly 100 to gradually discharge the developer T into the developing device 201, that is, a device to be supplied with the developer T, until the developer T is depleted of the developer T depleted.

Page 13, line 20, through page 14, line 1:

By allowing the compressed air in the air storage canister 2 to be discharged into the developer storage portion through a nozzle 3 as an air passage while the outlet 7a is open, the developer T in the container proper 7 is conveyed toward the outlet 7a, and then, is discharged from the outlet 7a to supply the apparatus main assembly with the developer T. The opening of the outlet 7a is circular, and is 10 mm in diameter.

Page 15, line 18, through page 16, line 1:

As the force applied to push the switch portion 1 by the image forming apparatus is removed, the switch portion 1 is moved in the opposite direction of the container proper from the outlet 7a by the force being applied to the switch portion 1 by the abovementioned above-mentioned pressing means 26, and returns to the initial position, in which the passage between the nozzle portion 3 and air storage portion 2a is blocked by the switch portion 1. As a result, the compressed air in the storage portion 2a stops discharging from the opening of the tip of the nozzle portion 3.

Page 17, lines 17 through 25:

The sealing member 6b is given the function of keeping sealed the adjacencies of the nozzle portion 3 while remaining slidable along the nozzle portion 3. As for the choice of a sealing member usable as the sealing member 6b, any of various known elastic sealing members is acceptable, for example, a sealing member formed of felt, sponge, a foamed substance, an oil seal, etc. In this embodiment, an oil seal is used as the sealing member 6b.

Page 19, lines 18 through 23:

With the employment of the above-described above-described two or more stoppers, it is prevented that the developer supply container 10 is removed from the apparatus main assembly 100 while its outlet 7a is open, and also, that the developing apparatus is activated while the developer supply container 10 is in the closed state.

Page 23, lines 4 through 8:

Incidentally, when it seems that the developer has become lumped in the developer supply container 10, the developer supply container 10 may be shaken several times before it is mounted into the apparatus main assembly 100.

Page 26, line 21, through page 27, line 1:

Further, the employment of the developer supply container 10 in this embodiment can reduce the amount of energy required of the main assembly by an amount equal to the amount of energy required to drive the developer supply container (energy dedicated to driving a powder pump). In other words, it contributes to reducing the amount of energy used by the main assembly.

Page 29, lines 12 through 23:

The developer supply container 10 in this embodiment is structured so that the axial line of the outlet 7a is parallel ~~to~~ with the axial line of the switch portion 1, and also, so that the portion of the developer container 10, which will be the bottom side when the container 10 is in the apparatus main assembly 100, is shaped so that the developer in the container 10 will collect, due to its own weight, to the outlet 7a. Therefore, the developer in the developer supply container 10 is efficiently discharged even when the amount by which the air jets out of the air storage portion 2a is rather small.

Page 33, lines 11 through 20:

Incidentally, in this embodiment, the developer supply container 10 was structured so that the axial line of the outlet 7a is parallel to with the axial line of the switch portion 1. However, it may be structured so that the axial line of the outlet 7a is perpendicular to the axial line of the switch portion 1 as in the first embodiment. Such a structural arrangement is just as high in developer conveyance efficiency as the structural arrangement for the developer supply container 10 in this embodiment.

Page 36, line 23, through page 37, line 5:

In this embodiment, the developer supply container 10 is structured so that the axial line of the outlet 7a is parallel to with the axial line of the switch portion 1. However, it may be structured so that the axial line of the outlet 7a is perpendicular to the axial line of the switch portion 1 as in the first embodiment. Such a structural arrangement is just as high in developer conveyance efficiency as the structural arrangement for the developer supply container 10 in this embodiment.

Page 39, line 21, through page 40, line 3:

Incidentally, in this embodiment, the developer supply container 10 was structured so that the axial line of the outlet 7a is parallel to with the axial line of the switch portion 1. However, it may be structured so that the axial line of the outlet 7a is perpendicular to the axial line of the switch portion 1 as in the first embodiment. Such a structural arrangement is just as high in developer conveyance efficiency as the structural arrangement for the developer supply container 10 in this embodiment.

Page 43, lines 11 through 27:

Incidentally, in this embodiment, the developer supply container 10 was structured so that the axial line of the outlet 7a is parallel to with the axial line of each of the plurality of springs 21. However, it may be structured so that the axial line of the outlet 7a is perpendicular to the axial line of each of the plurality of springs 21 as it was parallel to with the axial line of the switch portion 1 in the first embodiment. Such a structural arrangement is just as high in developer conveyance efficiency as the structural arrangement for the developer supply container 10 in this embodiment. The utilization of the resiliency of the springs as the power source, instead of the pressure of the compressed air in the air storage canister 2 (inclusive of nozzle portion 3 and switch portion 1), promises a substantial amount of reduction in manufacturing cost.

Page 44, lines 20 through 24:

The developer storage pouch 23 is elastic, and is expandable by injecting air into the developer storage pouch 23. Thus, the developer storage pouch 23 is filled with developer, and compressed air as a power source, being therefore in the inflated state.

Page 47, line 24, through page 48, line 9:

Incidentally, in this embodiment, the developer supply container 10 was structured so that the axial line of the outlet 7a is parallel to with the center line of the developer storage pouch 23. However, it may be structured so that the axial line of the outlet 7a is perpendicular to the center line of the developer storage pouch 23 as the axial line of the outlet 7a was perpendicular to the

axial line of the switch portion 1 in the first embodiment. Such a structural arrangement is just as high in developer conveyance efficiency as the structural arrangement for the developer supply container 10 in this embodiment.